

RECOMMENDING MISSOURI WATERFOWL SEASONS

Recommending the specific waterfowl seasons for Missouri involves hitting a “moving target” of migrations, weather, habitat conditions, and hunters’ preferences. Undoubtedly, these variables again will play an important role in determining when and where waterfowling opportunities will occur in 2004. Sixty-day seasons for ducks in recent years have provided much more flexibility in season setting because a wide range of migrations and weather can be bracketed by the 2-month season. Additionally, 3 zones allow for a season tailored for the diverse hunting styles from North to South Missouri. A complete review of the long-term information used to recommend seasons was prepared for a series of zoning workshops held in spring 2001. This summary can be found on the Department’s web page at:

<http://www.conservation.state.mo.us/hunt/wtrfowl/migrations>

In Missouri, hunting prospects are determined by (in order of importance) 1) wetland habitat conditions, 2) weather, 3) migration timing, and lastly 4) size of the fall flight. Unfortunately, the most important variables are the least predictable, and the extremes of the last 5 years have been examples of the variation in weather and habitat that can affect waterfowl seasons. Hunters’ attitudes about hunting season dates changed throughout this period as well. The predominant theme after mild seasons during 1997-1999 was for later duck season structure. This also was apparent during the zoning workshops that were held in spring 2001. Hunting season recommendations, however, must consider both short-term differences in hunter preferences in the context of long-term information about weather, migrations, and populations.

Duck Season Data for Missouri:

Considerable information is utilized each year when duck season dates are recommended for Missouri. Long-term trends of weather, migrations, and populations are the basis for duck season timing. **Weather** data, from selected weather reporting stations, include the temperature and precipitation affecting hunting conditions during September to January. **Migrations** of ducks have been reported on Missouri Department of Conservation wetland areas since 1948. Information about early-migrant dabbling ducks (teal, wigeon, pintails, etc.) and mallards both are considered when seasons are recommended. **Population** data from Department areas also are considered. These data, for both mallards and early-migrant dabblers, are the result of at least biweekly surveys conducted on each area since 1970. **Mallard band recovery** data provide a primary basis for information on the distribution of mallard harvest by location and date. Mallards are used because of their importance to Missouri hunters, annually accounting for 50%-70% of the statewide harvest. **Harvest** information from the U.S. Fish and Wildlife Service’s post-season harvest survey provide a means to consider harvest levels for groups of years with similar zone/split season configurations.

The Role of Hunter Opinions:

Each year we use current information from waterfowl harvest surveys in addition to hunter contacts by phone and mail to gauge whether season timing is consistent with hunter attitudes about preferred dates to hunt. This year about 8,700 hunters received a Waterfowl Post-Season Harvest Survey and 11,000 hunters, a Snow Goose Post-Season Harvest Survey. Participants were randomly selected for each survey to ensure that we received the opinions of all types of

hunters.

Measures of Hunter Satisfaction:

Hunters were more satisfied with the number of ducks they viewed, the number of ducks they harvested, and the number of days they hunted than they were after the 2002 season (Figure 15). This change corresponds to increased duck numbers, higher harvest, and weather

that afforded hunting opportunity throughout the 60-day season in Missouri in 2003 compared to 2002. Even though hunters had a 60-day season for the 7th consecutive year and Missouri had a record high harvest, over a third of Missouri duck hunters were dissatisfied with the number of ducks they harvested, the number of ducks they saw, and the number of days they hunted. Levels of dissatisfaction were the highest in the South Zone where 46% of hunters were dissatisfied with the number of ducks they saw and 41% were dissatisfied with the number of ducks they harvested.

Figure 15. Hunter satisfaction by zone, 2002 & 2003.

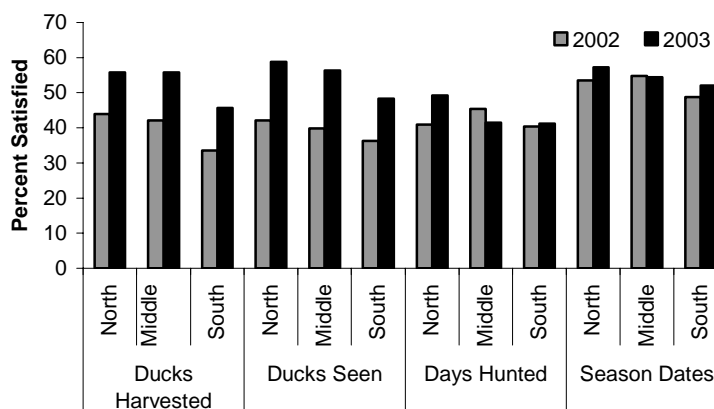
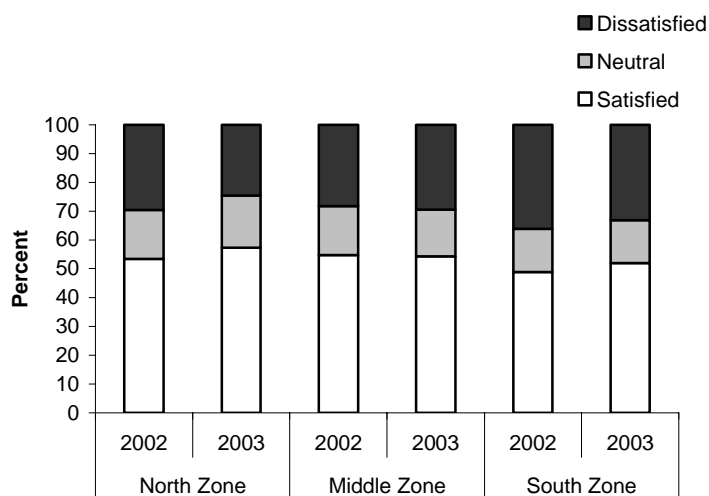


Figure 16. Satisfaction with season dates, 2002 and 2003.



Hunters' Views about Duck Season Dates:

A several year trend of mild weather affected duck availability and, consequently, hunter preferences shifted to later hunting season dates. In response, beginning in 2001, the season opened the latest ever within a 60-day framework. In 2001, zone boundaries were also modified in two locations to accommodate the majority of waterfowl hunters in those areas. After 2001 hunter

satisfaction with season dates has remained similar with about 50% of hunters indicating satisfaction with season dates (Figure 16).

Figure 17. North Zone – Week preferred to hunt ducks, 2001-2002 average & 2003.

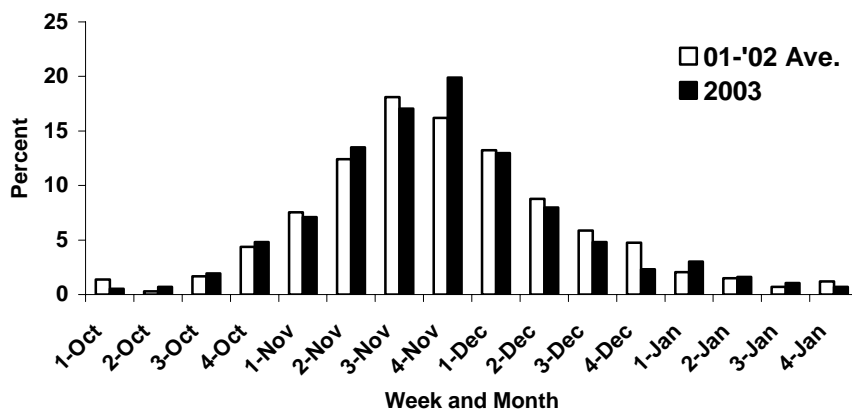


Figure 18. Middle Zone – Week preferred to hunt ducks, 2001-2002 average & 2003.

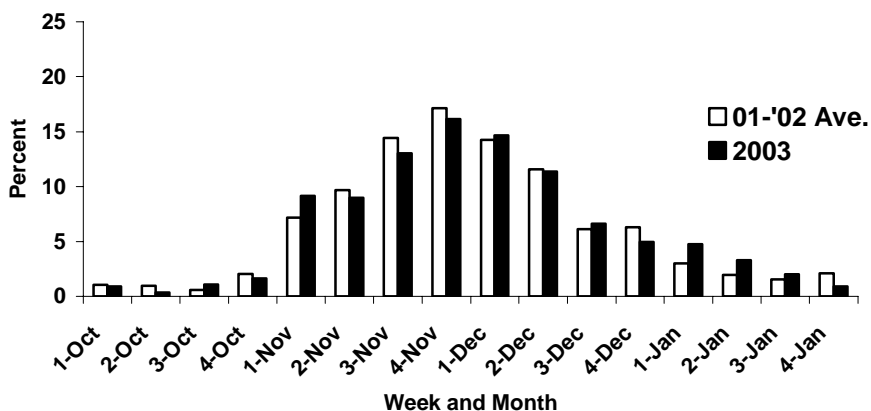
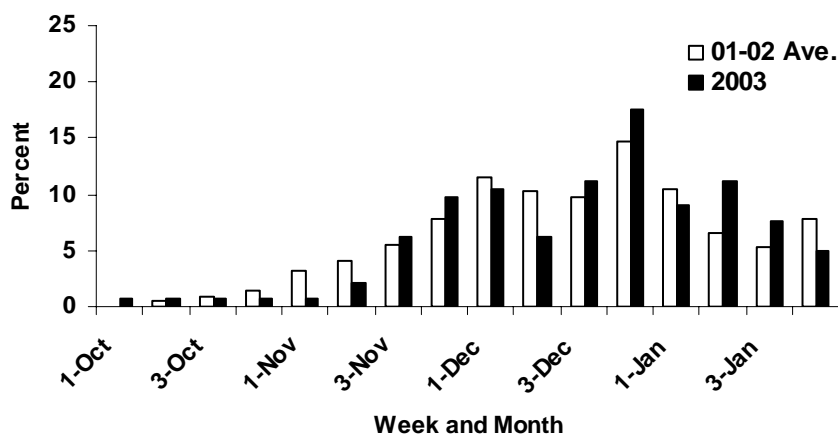


Figure 19. South Zone – Week preferred to hunt ducks, 2001-2002 average & 2003.



Year-to-year changes in hunting conditions result in annual differences of opinion. After an early freeze-up in 2000, hunters indicated earlier season preferences. After two years of relatively mild conditions, hunter opinions again shifted to late season preferences. Hunters were asked after each of the 1996-2003 seasons to indicate the week they most preferred to hunt ducks in the county they hunted most. In 2003, 58% of North Zone hunters indicated their preferred week to hunt ducks was in November, similar to 2002 (53%) and 2001 (56%) and down from 2000 (66%). Similarly, Middle Zone hunter preferences remained unchanged from 2002. Hunter preferences were the most widely

distributed in the South Zone where 19% of hunters preferred to hunt in November, 46% in December, and 33% in January. The proportion of South Zone hunters with a January preference has steadily increased since 2000 (21%, 26%, 34%, 33% in 2000, 2001, 2002, and 2003 respectively).

Even in a 60-day season, not all hunters' preferred week to hunt can be accommodated. In 2003, 12% of North Zone hunters, 15% of Middle Zone hunters, and 18% of South Zone hunters indicated that their preferred week to hunt fell outside of the dates offered last year. Seventy-three percent of these hunters indicated their preferred week to hunt was later than last year's structure allowed. These hunters were also much more dissatisfied with the season dates than the hunters who indicated that their preferred week to hunt was before last year's season opened (Figure 20). In addition, most comments provided on the Post-season Waterfowl Survey pertaining to season dates were requests for later season dates.

All hunter preferences are legitimate; however, varied attitudes about the "best" season are not necessarily shared by all hunters even in a local area. Species preferences (mallards vs. other dabblers), habitat types (shallow, managed sites vs. reservoirs and rivers), and weather conditions (mild vs. severe) are just some of the factors that contribute to differences in views about preferred season timing. As a result waterfowl season dates always are points of contention.

Figure 20. Hunter satisfaction with season dates by those with early & late season preferences.

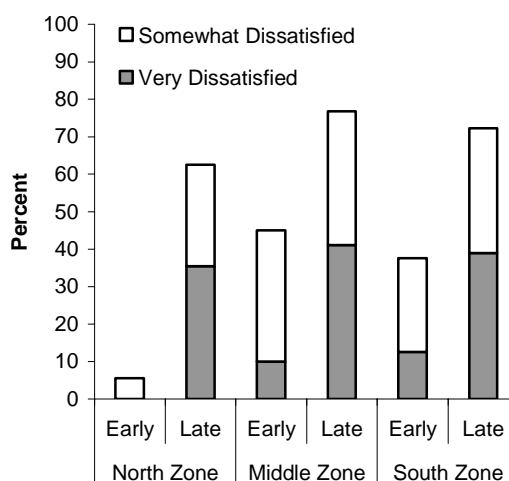
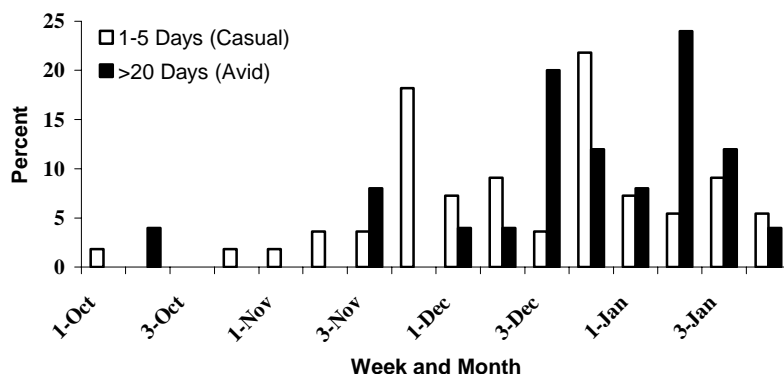


Figure 21. Week preferred to hunt by avid and casual South Zone hunters, 2003.



Avid versus Novice Hunters:

Avid hunters, the 12% who hunt more than 20 days per season, and novice hunters, the 46% who hunt less than 6 days per season, both must be considered when Missouri duck seasons are recommended. Their views, however, about preferred weeks to hunt are somewhat different. In the South Zone, for example, 31% of novice hunters' preferred week to hunt was in October or November compared to only

12% of avid hunters (Figure 21). In contrast, 48% of avid hunters versus 27% of novice hunters' preferred week to hunt was in January. The challenge is to provide seasons that encourage new and potentially future waterfowlers while maintaining involvement by experienced hunters.

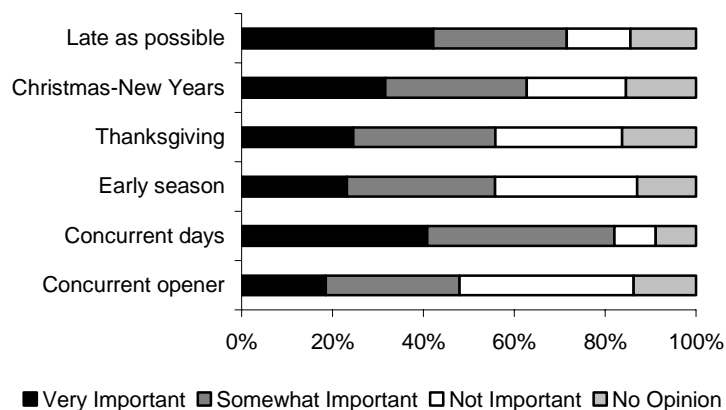
Canada Goose Season Preferences:

While hunter input plays an important role in determining duck hunting season dates, they play a lesser role in regards to Canada geese. Population status of giant Canada geese and Eastern Prairie Population (EPP) Canada geese are the primary considerations. Giant Canada numbers are higher and more stable than EPP Canada geese and therefore can sustain greater harvests. Canada goose harvest management in the Mississippi Flyway is designed to maximize harvest opportunity for giant Canada geese without overharvesting EPP Canada geese and other interior Canada goose populations. States are allowed early season opportunity when only giant Canada geese are present and limited days after EPP Canada geese typically arrive. In Missouri, for example, we are limited to 30 days of Canada goose hunting after November 30 in the North, Middle, and Swan Lake zones. Goose hunters desire late season opportunity (72% indicated it was important to have the goose season open as late as possible); however, 56% of goose hunters indicated that it also was important to have early season opportunity.

Preferences for Canada goose hunting have changed dramatically since the 1980s. Increases in numbers of giant Canada geese, delays in migration of the Eastern Prairie Population, and changing distribution of geese in Missouri all have been responsible. Traditionally, hunters indicated a desire for

concurrent duck and goose openers (73% in 1988 and 63.2% in 1996), but this has become less important (48% in 2002). In 2002, 82% of goose hunters still favored having at least some concurrent duck and goose days. We consider the timing of Thanksgiving weekend and Christmas/New Year's week and the need to control numbers of giant Canada geese (primarily through early seasons) as additional factors affecting goose season recommendations.

Figure 22. Goose hunter opinions of when goose seasons should be open.



Swan Lake Zone Elimination:

The Swan Lake Zone (SLZ) was established in 1962 to manage the harvest of EPP Canada geese that were associated with Swan Lake NWR during fall and winter. The number of Canada geese using the SLZ declined steadily since the 1970s, and by 1998, less than 5% of the statewide harvest occurred in the SLZ. Based upon the reduced harvest and low goose use, the Swan Lake

Zone no longer functions as a Canada goose harvest management zone. Therefore, we recommend that the Swan Lake Zone be eliminated for 2004. Delayed migrations and a wider distribution of EPP geese throughout the North and Middle Zones has required broadening EPP management considerations to also include the North and Middle Zones.

North and Middle Zone Considerations:

The week preferred to hunt Canada geese in the North Zone widely varied (22% prefer November, 35% December, and 40% January), reflecting preferences for early season giant Canada geese and late season migrants (Figure 23). In the middle zone, where fewer resident giant Canada geese are present, 46% of goose hunters' preferred week to hunt was in January (Figure 24).

South Zone and Southeast Zone Considerations:

Delayed migrations and few resident giant Canada geese contribute to South Zone Hunters preferences for late season goose hunting opportunity. In 2003, 49% (vs. 54% in 2002) of South Zone goose hunters indicated that their preferred week to hunt was in January. South Zone goose hunters are also faced with a trade-off between Canada goose hunting opportunity and snow goose hunting opportunity through the Light Goose Conservation Order. Extending the Canada goose season later into January delays the opening of the Conservation Order. We included a question on the Snow Goose Post Season

Figure 23. North Zone – Week most preferred to hunt Canada geese.

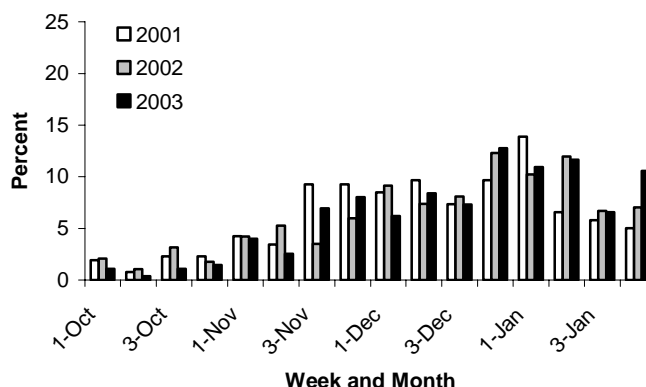


Figure 24. Middle Zone – Week most preferred to hunt Canada geese.

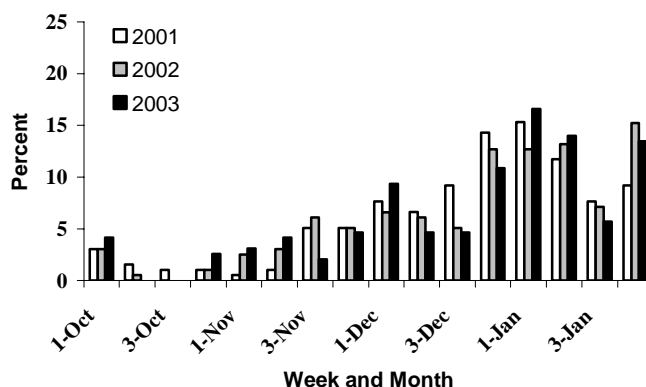
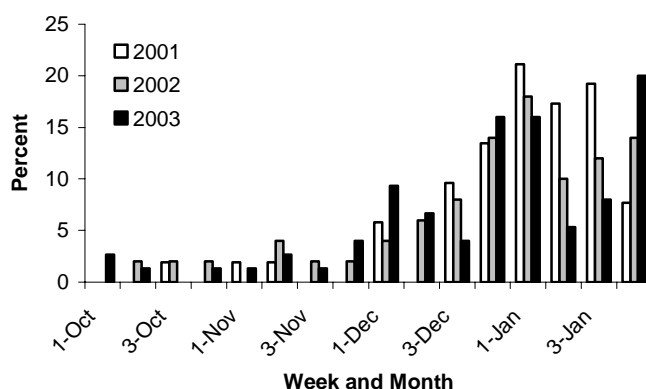


Figure 25. South & Southeast Zone – Week most preferred to hunt Canada geese.



Harvest Survey to determine if South and Southeast Zone hunters preferred delaying the Conservation Order to provide additional late season Canada goose hunting opportunity. Only a small proportion of goose hunters in this zone specialize in hunting snow geese only and 88% of them opposed delaying the Conservation Order. Most goose hunters in the South and Southeast Zones hunt Canada geese only and 82% of them support delaying the Conservation Order to provide late Canada goose hunting opportunity. Similarly, 72% of individuals who hunt Canada geese and snow geese support delaying the conservation order.

Future Challenges:

Shorter seasons are inevitable when drought conditions occur and waterfowl populations decline. We expect shorter seasons will result in more disagreement about preferred season dates. However, the same suite of hunter survey data, including week most preferred to hunt and the week preferred for the season to open will provide guidance. Preferences for the opening week in a 4-week season provide indications of the “core” duck season. Based on our surveys of duck hunter preferences, the week most preferred to hunt is, on average, within 2 weeks of hunters’ preferred times to open a 4-week season. In an 8-week season, the gap widens to just under 3 weeks in the North Zone and over 3 weeks in the South Zone. Hunters generally prefer later season opening dates in shorter seasons; however, there is much more disagreement about when the seasons should occur.

OUTLOOK FOR THE 2004 MISSOURI SEASON

The outlook for 2004 is less optimistic than most recent years. News of dryer wetland conditions, lower breeding duck numbers and a reduced mallard fall flight, combined with prospects of a late spring and poor production in primary Canada goose breeding areas will undoubtedly lower hunter expectations during fall 2004.

Regardless of a decline in duck or goose numbers, there will not be a penalty in the number of days allowed. Missouri hunters will once again have a 60-day duck season and a 70 plus day Canada goose season from which to select their hunting days. Season dates should continue to provide the opportunity for a variety of hunting styles, including early and late season hunting preferences.

Area-specific conditions will affect local hunting prospects (Appendices F and G). A relatively mild summer with above average rainfall throughout most of the state has resulted in excellent growing conditions for native wetland plants that produce duck food. Except for flooding which could affect seed production in some locations, wetland habitat conditions appear to be favorable going into late summer.